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 45 gctgggcggg cacggagaag atacctaga gtcagacgac aacattcaac gactgctaaa
 10200
 agactcttta cgaaggacaa gatgggtgga tcaagagggt cgccatgcag ctagaacct
 10260
 gactggagat tacagcccca acaagaagggt gtcccgtaa gtaggatgtt cagaatgggt
 50 10320
 ctgctctgct caacagggtg cagtctctac ctgagcaaac ccggcccctg tctcggagct
 10380
 tgacataagg gccctctcta agaggttcca gaacccttg atctcgggct tgagagtgg
 10440

tcagtgggca accggtgctc attataagct taagcctatt ctagatgata tcaatgtttt
 10500
 cccatctctc tgcctttag tagtggggacgg gtcagggggg atatcaaggg cagtcctcaa
 10560
 5 catgtttcca gatgccaagc ttgtgttcaa cagtctttta gaggtgaatg acctgatggc
 10620
 ttccggaaca catccactgc ctcttcagc aatcatgagg ggaggaaatg atatcgtctc
 10680
 10 cagagtgata gatcttgact caatctggga aaaaccgtcc gacttgagaa acttggaac
 10740
 ctggaaatac ttccagtcag tccaaaagca ggtcaacatg tcctatgacc tcattatttg
 10800
 cgatgcagaa gttactgaca ttgcatctat caaccggatc accctgttaa tgtccgattt
 10860
 15 tgcattgtct atagatggac cactctattt ggtcttcaaa acttatggga ctatgctagt
 10920
 aaatccaaac tacaaggcta ttcaacacct gtcaagagcg ttcccctcgg tcacagggtt
 10980
 20 taccacca gtaacttcgt ctttttcac tgagctctac ctccgattct ccaaaccagg
 11040
 gaagtttttc agagatgctg agtacttgac ctctccacc ctccgagaaa tgagccttgt
 11100
 gttattcaat ttagcagcc ccaagagtga gatgcagaga gtcggttct tgaactatca
 11160
 25 ggtcttcttg agaggatttc ctgaagaaat catatcaaat cttacaatg agatgatcat
 11220
 aactctgatt gacagtgatg tagaatcttt tctagtccac aagatgggtg atgatcttga
 11280
 gttacagagg ggaactctgt ctaaagtggc tatcattata gccatcatga tagttttctc
 11340
 30 caacagagtc ttcaacgttt ccaaaccct aactgacccc tcgttctatc caccgtctga
 11400
 tcccaaaatc ctgaggcact tcaacatatg ttgcagtact atgatgtatc tatctactgc
 11460
 35 ttttagtgac gtccctagct tcgcaagact tcacgacctg tataacagac ctataactta
 11520
 ttacttcaga aagcaagtca ttcgaggga cgtttatcta tcttgaggtt ggtccaacga
 11580
 40 cacctcagtg ttcaaaagg tagcctgtaa ttctagcctg agtctgtcat ctactggat
 11640
 caggttgatt tacaagatag tgaagactac cagactcgtt ggcagcatca aggatctatc
 11700
 cagagaagtg gaaagacacc ttcataggta caacagggtg atcacctag aggatatcag
 11760
 45 atctagatca tccctactag actacagttg cctgtgaacc ggatactcct ggaagcctgc
 11820
 ccatgctaag actcttctgt gatgtatctt gaaaaaaca agatcctaaa tctgaacctt
 11880
 50 tgggtgtttg attgtttttc tcatttttgt tgtttatttg ttaagcgt
 11928

 <210> 59
 <211> 523
 <212> PRT
 55 <213> Rabies virus

<400> 59
Met Val Pro Gln Ala Leu Leu Phe Val Pro Leu Leu Val Phe Pro Leu
1 5 10 15
Cys Phe Gly Lys Phe Pro Ile Tyr Thr Ile Pro Asp Lys Leu Gly Pro
5 20 25 30
Trp Ser Pro Ile Asp Ile His His Leu Ser Cys Pro Asn Asn Leu Val
35 40 45
Val Glu Asp Glu Gly Cys Thr Asn Leu Ser Gly Phe Ser Tyr Met Glu
50 55 60
10 Leu Lys Val Gly Tyr Ile Leu Ala Ile Lys Val Asn Gly Phe Thr Cys
65 70 75 80
Thr Gly Val Val Thr Glu Ala Glu Thr Tyr Thr Asn Phe Val Gly Tyr
85 90 95
15 Val Thr Thr Thr Phe Lys Arg Lys His Phe Arg Pro Thr Pro Asp Ala
100 105 110
Cys Arg Ala Ala Tyr Asn Trp Met Ala Gly Asp Pro Arg Tyr Glu Glu
115 120 125
Ser Leu His Asn Pro Tyr Pro Asp Tyr Arg Trp Leu Arg Thr Val Lys
130 135 140
20 Thr Thr Lys Glu Ser Leu Val Ile Ile Ser Pro Ser Val Ala Asp Leu
145 150 155 160
Asp Pro Tyr Asp Arg Ser Leu His Ser Arg Val Phe Pro Ser Gly Lys
165 170 175
25 Cys Ser Gly Val Ala Val Ser Ser Thr Tyr Cys Ser Thr Asn His Asp
180 185 190
Tyr Thr Ile Trp Met Pro Glu Asn Pro Arg Leu Gly Met Ser Cys Asp
195 200 205
Ile Phe Thr Asn Ser Arg Gly Lys Arg Ala Ser Lys Gly Ser Glu Thr
210 215 220
30 Cys Gly Phe Val Asp Glu Arg Gly Leu Tyr Lys Ser Leu Lys Gly Ala
225 230 235 240
Cys Lys Leu Lys Leu Cys Gly Val Leu Gly Leu Arg Leu Met Asp Gly
245 250 255
35 Thr Trp Val Ser Met Gln Thr Ser Asn Glu Thr Lys Trp Cys Pro Pro
260 265 270
Asp Lys Leu Val Asn Leu His Asp Phe Arg Ser Asp Glu Ile Glu His
275 280 285
Leu Val Val Glu Glu Leu Val Arg Lys Arg Glu Glu Cys Leu Asp Ala
290 295 300
40 Leu Glu Ser Ile Met Thr Thr Lys Ser Val Ser Phe Arg Arg Leu Ser
305 310 315 320
His Leu Arg Lys Leu Val Pro Gly Phe Gly Lys Ala Tyr Thr Ile Phe
325 330 335
45 Asn Lys Thr Leu Met Glu Ala Asp Ala His Tyr Lys Ser Val Arg Thr
340 345 350
Trp Asn Glu Ile Leu Pro Ser Lys Gly Cys Leu Arg Val Gly Gly Arg
355 360 365
Cys His Pro His Val Asn Gly Val Phe Phe Asn Gly Ile Ile Leu Gly
370 375 380
50 Pro Asp Gly Asn Val Leu Ile Pro Glu Met Gln Ser Ser Leu Leu Gln
385 390 395 400
Gln His Met Glu Leu Glu Ser Ser Val Ile Pro Leu Val His Pro
405 410 415
55 Leu Ala Asp Pro Ser Thr Val Phe Lys Asp Gly Asp Glu Ala Glu Asp
420 425 430

Phe Val Glu Val His Leu Pro Asp Val His Asn Gln Val Ser Gly Val
 435 440 445
 Asp Leu Gly Leu Pro Asn Trp Gly Lys Tyr Val Leu Ser Ala Gly
 450 455 460
 5 Ala Leu Thr Ala Leu Met Leu Ile Ile Phe Leu Met Thr Cys Cys Arg
 465 470 475 480
 Arg Val Asn Arg Ser Glu Pro Thr Gln His Asn Leu Arg Gly Thr Gly
 485 490 495
 10 Arg Glu Val Ser Val Thr Pro Gln Ser Gly Lys Ile Ile Ser Ser Trp
 500 505 510
 Glu Ser His Lys Ser Gly Gly Glu Thr Arg Leu
 515 520

 <210> 60
 <211> 523
 15 <212> PRT
 <213> Rabies virus

 <400> 60
 Met Val Pro Gln Ala Leu Leu Phe Val Pro Leu Leu Val Phe Pro Leu
 1 5 10 15
 20 Cys Phe Gly Lys Phe Pro Ile Tyr Thr Ile Pro Asp Lys Leu Gly Pro
 20 25 30
 Trp Ser Pro Ile Asp Ile His His Leu Ser Cys Pro Asn Asn Leu Val
 35 40 45
 25 Val Glu Asp Glu Gly Cys Thr Asn Leu Ser Gly Phe Ser Tyr Met Glu
 50 55 60
 Leu Lys Val Gly Tyr Ile Leu Ala Ile Lys Val Asn Gly Phe Thr Cys
 65 70 75 80
 Thr Gly Val Val Thr Glu Ala Glu Thr Tyr Thr Asn Phe Val Gly Tyr
 85 90 95
 30 Val Thr Thr Thr Phe Lys Arg Lys His Phe Arg Pro Thr Pro Asp Ala
 100 105 110
 Cys Arg Ala Tyr Asn Trp Met Ala Gly Asp Pro Arg Tyr Glu Glu
 115 120 125
 35 Ser Leu His Asn Pro Tyr Pro Asp Tyr Arg Trp Leu Arg Thr Val Lys
 130 135 140
 Thr Thr Lys Glu Ser Leu Val Ile Ile Ser Pro Ser Val Ala Asp Leu
 145 150 155 160
 Asp Pro Tyr Asp Arg Ser Leu His Ser Arg Val Phe Pro Ser Gly Lys
 165 170 175
 40 Cys Ser Gly Val Ala Val Ser Ser Thr Tyr Cys Ser Thr Asn His Asp
 180 185 190
 Tyr Thr Ile Trp Met Pro Glu Asn Pro Arg Leu Gly Met Ser Cys Asp
 195 200 205
 45 Ile Phe Thr Asn Ser Arg Gly Lys Arg Ala Ser Lys Gly Ser Glu Thr
 210 215 220
 Cys Gly Phe Val Asp Glu Arg Gly Leu Tyr Lys Ser Leu Lys Gly Ala
 225 230 235 240
 Cys Lys Leu Lys Leu Cys Gly Val Leu Gly Leu Arg Leu Met Asp Gly
 245 250 255
 50 Thr Trp Val Ser Met Gln Thr Ser Asn Glu Thr Lys Trp Cys Pro Pro
 260 265 270
 Asp Lys Leu Val Asn Leu His Asp Phe Arg Ser Asp Glu Ile Glu His

[illegible]

Thr Arg Asp Pro Thr Val Pro Glu His Ala Ser Leu Val Gly Leu Leu
 130 135 140
 Leu Ser Leu Tyr Arg Leu Ser Lys Ile Ser Gly Gln Asn Thr Gly Asn
 145 150 155 160
 5 Tyr Lys Thr Asn Ile Ala Asp Arg Ile Glu Gln Ile Phe Glu Thr Ala
 165 170 175
 Pro Phe Val Lys Ile Val Glu His His Thr Leu Met Thr Thr His Lys
 180 185 190
 10 Met Cys Ala Asn Trp Ser Thr Ile Pro Asn Phe Arg Phe Leu Ala Gly
 195 200 205
 Thr Tyr Asp Met Phe Phe Ser Arg Ile Glu His Leu Tyr Ser Ala Ile
 210 215 220
 Arg Val Gly Thr Val Val Thr Ala Tyr Glu Asp Cys Ser Gly Leu Val
 225 230 235 240
 15 Ser Phe Thr Gly Phe Ile Lys Gln Ile Asn Leu Thr Ala Arg Glu Ala
 245 250 255
 Ile Leu Tyr Phe Phe His Lys Asn Phe Glu Glu Glu Ile Arg Arg Met
 260 265 270
 20 Phe Glu Pro Gly Gln Glu Thr Ala Val Pro His Ser Tyr Phe Ile His
 275 280 285
 Phe Arg Ser Leu Gly Leu Ser Gly Lys Ser Pro Tyr Ser Ser Asn Ala
 290 295 300
 Val Gly His Val Phe Asn Leu Ile His Phe Val Gly Cys Tyr Met Gly
 305 310 315 320
 25 Gln Val Arg Ser Leu Asn Ala Thr Val Ile Ala Ala Cys Ala Pro His
 325 330 335
 Glu Met Ser Val Leu Gly Gly Tyr Leu Gly Glu Glu Phe Phe Gly Lys
 340 345 350
 30 Gly Thr Phe Glu Arg Arg Phe Phe Arg Asp Glu Lys Glu Leu Gln Glu
 355 360 365
 Tyr Glu Ala Ala Glu Leu Thr Lys Thr Asp Val Ala Leu Ala Asp Asp
 370 375 380
 Gly Thr Val Asn Ser Asp Asp Glu Asp Tyr Phe Ser Gly Glu Thr Arg
 385 390 395 400
 35 Ser Pro Glu Ala Val Tyr Thr Arg Ile Met Met Asn Gly Gly Arg Leu
 405 410 415
 Lys Arg Ser His Ile Arg Arg Tyr Val Ser Val Ser Ser Asn His Gln
 420 425 430
 40 Ala Arg Pro Asn Ser Phe Ala Glu Phe Leu Asn Lys Thr Tyr Ser Ser
 435 440 445
 Asp Ser
 450

<210> 62
 <211> 450
 45 <212> PRT
 <213> Rabies virus

<400> 62
 Met Asp Ala Asp Lys Ile Val Phe Lys Val Asn Asn Gln Val Val Ser
 1 5 10 15
 50 Leu Lys Pro Glu Ile Ile Val Asp Gln Tyr Glu Tyr Lys Tyr Pro Ala
 20 25 30
 Ile Lys Asp Leu Lys Lys Pro Cys Ile Thr Leu Gly Lys Ala Pro Asp

	35	40	45
	Leu Asn Lys Ala Tyr Lys Ser Val Leu Ser Gly Met Ser Ala Ala Lys		
	50	55	60
5	Leu Asn Pro Asp Asp Val Cys Ser Tyr Leu Ala Ala Ala Met Gln Phe		
	65	70	75
	Phe Glu Gly Thr Cys Pro Glu Asp Trp Thr Ser Tyr Gly Ile Val Ile		
	85	90	95
	Ala Arg Lys Gly Asp Lys Ile Thr Pro Gly Ser Leu Val Glu Ile Lys		
	100	105	110
10	Arg Thr Asp Val Glu Gly Asn Trp Ala Leu Thr Gly Gly Met Glu Leu		
	115	120	125
	Thr Arg Asp Pro Thr Val Pro Glu His Ala Ser Leu Val Gly Leu Leu		
	130	135	140
	Leu Ser Leu Tyr Arg Leu Ser Lys Ile Ser Gly Gln Asn Thr Gly Asn		
15	145	150	155
	Tyr Lys Thr Asn Ile Ala Asp Arg Ile Glu Gln Ile Phe Glu Thr Ala		
	165	170	175
	Pro Phe Val Lys Ile Val Glu His His Thr Leu Met Thr Thr His Lys		
	180	185	190
20	Met Cys Ala Asn Trp Ser Thr Ile Pro Asn Phe Arg Phe Leu Ala Gly		
	195	200	205
	Thr Tyr Asp Met Phe Phe Ser Arg Ile Glu His Leu Tyr Ser Ala Ile		
	210	215	220
	Arg Val Gly Thr Val Val Thr Ala Tyr Glu Asp Cys Ser Gly Leu Val		
25	225	230	235
	Ser Phe Thr Gly Phe Ile Lys Gln Ile Asn Leu Thr Ala Arg Glu Ala		
	245	250	255
	Ile Leu Tyr Phe Phe His Lys Asn Phe Glu Glu Glu Ile Arg Arg Met		
	260	265	270
30	Phe Glu Pro Gly Gln Glu Thr Ala Val Pro His Ser Tyr Phe Ile His		
	275	280	285
	Phe Arg Ser Leu Gly Leu Ser Gly Lys Ser Pro Tyr Ser Ser Asn Ala		
	290	295	300
	Val Gly His Val Phe Asn Leu Ile His Phe Val Gly Cys Tyr Met Gly		
35	305	310	315
	Gln Val Arg Ser Leu Asn Ala Thr Val Ile Ala Ala Cys Ala Pro His		
	325	330	335
	Glu Met Ser Val Leu Gly Gly Tyr Leu Gly Glu Glu Phe Phe Gly Lys		
	340	345	350
40	Gly Thr Phe Glu Arg Arg Phe Phe Arg Asp Glu Lys Glu Leu Gln Glu		
	355	360	365
	Tyr Glu Ala Ala Glu Leu Thr Lys Thr Asp Val Ala Leu Ala Asp Asp		
	370	375	380
	Gly Thr Val Asn Ala Asp Asp Glu Asp Tyr Phe Ser Gly Glu Thr Arg		
45	385	390	395
	Ser Pro Glu Ala Val Tyr Thr Arg Ile Met Met Asn Gly Gly Arg Leu		
	405	410	415
	Lys Arg Ser His Ile Arg Arg Tyr Val Ser Val Ser Ser Asn His Gln		
	420	425	430
50	Ala Arg Pro Asn Ser Phe Ala Glu Phe Leu Asn Lys Thr Tyr Ser Ser		
	435	440	445
	Asp Ser		
	450		

<210> 63
 <211> 450
 <212> PRT
 <213> Rabies virus

5 <400> 63
 Met Asp Ala Asp Lys Ile Val Phe Lys Val Asn Asn Gln Val Val Ser
 1 5 10 15
 Leu Lys Pro Glu Ile Ile Val Asp Gln Tyr Glu Tyr Lys Tyr Pro Ala
 20 25 30
 10 Ile Lys Asp Leu Lys Lys Pro Cys Ile Thr Leu Gly Lys Ala Pro Asp
 35 40 45
 Leu Asn Lys Ala Tyr Lys Ser Val Leu Ser Gly Met Ser Ala Ala Lys
 50 55 60
 15 Leu Asn Pro Asp Asp Val Cys Ser Tyr Leu Ala Ala Ala Met Gln Phe
 65 70 75 80
 Phe Glu Gly Thr Cys Pro Glu Asp Trp Thr Ser Tyr Gly Ile Val Ile
 85 90 95
 Ala Arg Lys Gly Asp Lys Ile Thr Pro Gly Ser Leu Val Glu Ile Lys
 100 105 110
 20 Arg Thr Asp Val Glu Gly Asn Trp Ala Leu Thr Gly Gly Met Glu Leu
 115 120 125
 Thr Arg Asp Pro Thr Val Pro Glu His Ala Ser Leu Val Gly Leu Leu
 130 135 140
 25 Leu Ser Leu Tyr Arg Leu Ser Lys Ile Ser Gly Gln Asn Thr Gly Asn
 145 150 155 160
 Tyr Lys Thr Asn Ile Ala Asp Arg Ile Glu Gln Ile Phe Glu Thr Ala
 165 170 175
 Pro Phe Val Lys Ile Val Glu His His Thr Leu Met Thr Thr His Lys
 180 185 190
 30 Met Cys Ala Asn Trp Ser Thr Ile Pro Asn Phe Arg Phe Leu Ala Gly
 195 200 205
 Thr Tyr Asp Met Phe Phe Ser Arg Ile Glu His Leu Tyr Ser Ala Ile
 210 215 220
 35 Arg Val Gly Thr Val Val Thr Ala Tyr Glu Asp Cys Ser Gly Leu Val
 225 230 235 240
 Ser Phe Thr Gly Phe Ile Lys Gln Ile Asn Leu Thr Ala Arg Glu Ala
 245 250 255
 Ile Leu Tyr Phe Phe His Lys Asn Phe Glu Glu Glu Ile Arg Arg Met
 260 265 270
 40 Phe Glu Pro Gly Gln Glu Thr Ala Val Pro His Ser Tyr Phe Ile His
 275 280 285
 Phe Arg Ser Leu Gly Leu Ser Gly Lys Ser Pro Tyr Ser Ser Asn Ala
 290 295 300
 45 Val Gly His Val Phe Asn Leu Ile His Phe Val Gly Cys Tyr Met Gly
 305 310 315 320
 Gln Val Arg Ser Leu Asn Ala Thr Val Ile Ala Ala Cys Ala Pro His
 325 330 335
 Glu Met Ser Val Leu Gly Gly Tyr Leu Gly Glu Glu Phe Phe Gly Lys
 340 345 350
 50 Gly Thr Phe Glu Arg Arg Phe Phe Arg Asp Glu Lys Glu Leu Gln Glu
 355 360 365
 Tyr Glu Ala Ala Glu Leu Thr Lys Thr Asp Val Ala Leu Ala Asp Asp
 370 375 380
 Gly Thr Val Asn Gly Asp Asp Glu Asp Tyr Phe Ser Gly Glu Thr Arg

	385		390		395		400									
	Ser	Pro	Glu	Ala	Val	Tyr	Thr	Arg	Ile	Met	Met	Asn	Gly	Gly	Arg	Leu
				405						410					415	
5	Lys	Arg	Ser	His	Ile	Arg	Arg	Tyr	Val	Ser	Val	Ser	Ser	Asn	His	Gln
			420					425						430		
	Ala	Arg	Pro	Asn	Ser	Phe	Ala	Glu	Phe	Leu	Asn	Lys	Thr	Tyr	Ser	Ser
			435					440						445		
	Asp	Ser														
		450														
10	<210> 64															
	<211> 450															
	<212> PRT															
	<213> Rabies virus															
	<400> 64															
15	Met	Asp	Ala	Asp	Lys	Ile	Val	Phe	Lys	Val	Asn	Asn	Gln	Val	Val	Ser
	1				5					10					15	
	Leu	Lys	Pro	Glu	Ile	Ile	Val	Asp	Gln	Tyr	Glu	Tyr	Lys	Tyr	Pro	Ala
				20					25					30		
20	Ile	Lys	Asp	Leu	Lys	Lys	Pro	Cys	Ile	Thr	Leu	Gly	Lys	Ala	Pro	Asp
			35				40						45			
	Leu	Asn	Lys	Ala	Tyr	Lys	Ser	Val	Leu	Ser	Gly	Met	Ser	Ala	Ala	Lys
	50						55				60					
	Leu	Asn	Pro	Asp	Asp	Val	Cys	Ser	Tyr	Leu	Ala	Ala	Ala	Met	Gln	Phe
	65				70					75					80	
25	Phe	Glu	Gly	Thr	Cys	Pro	Glu	Asp	Trp	Thr	Ser	Tyr	Gly	Ile	Val	Ile
				85					90					95		
	Ala	Arg	Lys	Gly	Asp	Lys	Ile	Thr	Pro	Gly	Ser	Leu	Val	Glu	Ile	Lys
				100					105					110		
30	Arg	Thr	Asp	Val	Glu	Gly	Asn	Trp	Ala	Leu	Thr	Gly	Gly	Met	Glu	Leu
			115				120						125			
	Thr	Arg	Asp	Pro	Thr	Val	Pro	Glu	His	Ala	Ser	Leu	Val	Gly	Leu	Leu
	130					135					140					
	Leu	Ser	Leu	Tyr	Arg	Leu	Ser	Lys	Ile	Ser	Gly	Gln	Asn	Thr	Gly	Asn
	145				150					155					160	
35	Tyr	Lys	Thr	Asn	Ile	Ala	Asp	Arg	Ile	Glu	Gln	Ile	Phe	Glu	Thr	Ala
				165					170					175		
	Pro	Phe	Val	Lys	Ile	Val	Glu	His	His	Thr	Leu	Met	Thr	Thr	His	Lys
				180					185					190		
40	Met	Cys	Ala	Asn	Trp	Ser	Thr	Ile	Pro	Asn	Phe	Arg	Phe	Leu	Ala	Gly
			195					200					205			
	Thr	Tyr	Asp	Met	Phe	Phe	Ser	Arg	Ile	Glu	His	Leu	Tyr	Ser	Ala	Ile
	210						215					220				
	Arg	Val	Gly	Thr	Val	Val	Thr	Ala	Tyr	Glu	Asp	Cys	Ser	Gly	Leu	Val
	225				230					235					240	
45	Ser	Phe	Thr	Gly	Phe	Ile	Lys	Gln	Ile	Asn	Leu	Thr	Ala	Arg	Glu	Ala
				245					250					255		
	Ile	Leu	Tyr	Phe	Phe	His	Lys	Asn	Phe	Glu	Glu	Glu	Ile	Arg	Arg	Met
			260					265					270			
	Phe	Glu	Pro	Gly	Gln	Glu	Thr	Ala	Val	Pro	His	Ser	Tyr	Phe	Ile	His
			275				280					285				
50	Phe	Arg	Ser	Leu	Gly	Leu	Ser	Gly	Lys	Ser	Pro	Tyr	Ser	Ser	Asn	Ala
		290					295				300					

[illegible]